

AS

Notice of Allowability

Application No.

09/963,308

Examiner

Ricky L. Mack

Applicant(s)

KOBAYASHI ET AL.

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 26 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 0901
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



Ricky L Mack
Primary Examiner
Art Unit: 2873

REASONS FOR ALLOWANCE

1. Claims 1-12 are allowed.
2. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 1-12, wherein an image display apparatus comprises a display device of a reflective type for displaying an image an reflecting illumination light; an eyepiece optical system having a front portion and a rear portion nearer to the display device and a front portion farther from the display device; a light source disposed in a conjugate position with an observation point for emitting the illumination light fed to the display device; and a combiner disposed between the rear and front portion, wherein the rear portion of the eyepiece optical system includes a refractive optical element having a positive power, the front portion of the eyepiece optical system includes a concave reflective surface, and the eyepiece optical system has an exit pupil behind and at a finite distance from the display device, as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following references are cited for disclosing an image display apparatus having an image display, an illumination source, and a reflective concave surface, but these references do not disclose a display device of a reflective type for displaying an image an reflecting illumination light; an eyepiece optical system having a front portion and a rear portion nearer to the display device and a front portion farther from the display device; a light source disposed in a conjugate position with an observation point for emitting the illumination light fed to the display device; and a combiner disposed between the rear and front portion, wherein the rear portion of the eyepiece optical system includes a refractive optical element having a positive power, the front portion of the eyepiece optical system includes a concave reflective surface, and the eyepiece optical system has an exit pupil behind and at a finite distance from the display device, as claimed: Hayakawa et al. (6313950 & 6333820), Takeyama (6342871), Travers et al. (6417970), Togino et al. (6445507), Inoguchi et al. (6493146), Takeyama (6512635), Kuramochi et al. (6552854), Jung et al. (6655820), Okuyama et al. (6814442), Takeyama (2001/0022689) and Yamazaki (2002/0060851).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky L. Mack whose telephone number is (571) 272-2333. The examiner can normally be reached on Monday-Friday (6:30 AM to 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ricky L. Mack
Primary Examiner
Art Unit 2873

RM

August 29, 2005